REMARKS

This amendment is submitted in response to the office action dated August 10, 2005. Reconsideration and allowance of claims is requested. In this office action, claims 20-27 were rejected under 35 U.S.C. 112 as being indefinite. Therefore, claim 20 has been reviewed and edited to eliminate the objectionable language, and the claims are now sufficiently definite and clear to be entitled to allowance.

Claims 1 and 28-35 are rejected under 35 U.S.C. 102(b) as anticipated by *Kwok* US 6,088,044. In response, claim 1 has been amended to incorporate a portion of allowable claim 2; claim 28 has been amended in similar fashion. In view of the clear distinctions between the invention as claimed and the art cited, reconsideration of these claims and allowance of these claims is respectfully requested.

The allowability of the remaining claims 2-27 over the art of record is noted. Claims 29-35 are cancelled; new claims 36-40 are submitted.

Claims 1 and 28 are rejected under 35 U.S.C. 102(d) as anticipated by *Kwok* US 6,088,044. This rejection is respectfully traversed. Applicant has amended claims 1 and 28 to clearly recite the feature previously described in a portion of claim 2 and described at length in paragraphs 50 and 51 of the present application. Specifically, the amendments are based on a review of paragraph 15 in the office action wherein the Examiner acknowledges that the allowable subject matter comprises in part configuring the multithreaded processing unit to disable processing of samples independent of order and processing a portion of the samples in the order in which the samples are received. As amended, the claims 1 and 28 now specifically call out the feature of disabling processing of samples independent in order in which samples are received to minimize visual artifacts in the rendered scene and adding the language by preventing the occurrence of position hazards. As previously noted, this feature is described at length at paragraphs 50 and 51 of the present application. The significance of this feature is identified as being the fact that in its absence, a position hazard can exist because the order in which sample will be processed is not deterministic. Paragraph 51 explains the implementation of this feature wherein a process independent of order

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(PIOR) flag is used to disable the prevention of positions hazards, while disabling the flag eliminates image artifacts and improves while enabling the PIOR flag during rendering improves performance. The claims newly presented further identify that a flag may be identified or dedicated for each thread type within the multiprocessing unit.

The *Kwok* reference clearly includes only a general reference to the use of the multiprocessing unit to process multiple threads, without any description or suggestion of the advantages and features now incorporated in claims 1 and 28, and their dependent claims, as described above. While *Kwok* at col. 10, lines 25-27 discloses terminating processing of a thread, this is done on an event-by-event basis. There is no teaching of the problem of minimizing visual artifacts, or the solution of preventing position hazards, much less the specific approach of disabling processing of samples independent of the order received in a multithreaded processing unit. Therefore, consideration and allowance of these claims is respectfully requested.

Respectfully submitted,

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